

## REMARKS/ARGUMENTS

Claims 2-5 are pending herein. Claim 4 has been amended hereby. Applicant respectfully submits that no new matter has been added.

1. Examiner Guharay is thanked for courtesies extended to Applicant's representative during a telephonic interview on October 8, 2003, the substance of which is incorporated below.

2. Claims 4 and 5 were rejected under §102(e) over Sugimoto. Applicant respectfully traverses this rejection.

Independent claim 4 recites a light transmittable ceramic envelope for a high intensity discharge lamp, comprising a barrel section defining a discharge space. The barrel section has integrally formed end portions that have an inner diameter that is smaller than an inner diameter of the barrel section to form electrode insertion sections protruding outwardly from the barrel section. A terminal end of each electrode insertion section defines a respective terminal end of the ceramic envelope, and the thickness dimension of each electrode insertion section, defined between outer and inner surfaces thereof, is substantially constant along the entire length thereof. A boundary portion between the barrel section and the inner surface of each electrode insertion section has a radius of curvature  $R$  in a range of 0.01 mm to 3.0 mm.

In the Office Action, the PTO asserted that

“Sugimoto's ceramic envelope has a barrel section 11 and two smaller diameter end sections (12a, and 12b), which serves [sic] as electrode insertion section, that means electrodes are inserted in the end sections. Thus [sic] boundary between barrel section and electrode insertion section is the curved boundary between [sic] barrel portion and the end portions, which provide electrode insertion” (Office Action, page 4, line 20--page 5, line 2).

In that manner, the PTO asserted that the second cylindrical portions 12a, 12b of Sugimoto's discharge tube 1 (see Fig. 2) correspond to the electrode insertion sections of claim 1. Applicant respectfully submits, however, that the second cylindrical

portions 12a, 12b of Sugimoto do not correspond to the electrode insertion sections recited in rewritten claim 4, wherein a terminal end of each electrode insertion section defines a respective terminal end *of the ceramic envelope* and wherein a thickness dimension of each electrode section, defined between outer and inner surfaces thereof, is substantially constant along the entire length thereof.

For example, Col. 4, lines 6-13 of Sugimoto recite that Sugimoto's discharge tube "comprises a first cylindrical portion 11, second cylindrical portion 12a and 12b, third cylindrical portion 13a and 13b and tapered portions 14a and 14b connecting the first cylindrical portion 11 to the second cylindrical portions 12a and 12b. The first cylindrical portion 11, the tapered portions 14a and 14b, and the second cylindrical portions 12a and 12b are formed in one piece." Sugimoto further recites that the "second cylindrical portion 12a and the third cylindrical portion 13a, as well as the second cylindrical portion 12b and the third cylindrical portion 13b are connected by shrinkage fitting" (Col. 4, lines 18-21). In that manner, Applicant respectfully submits that the terminal end of the second cylindrical portion 12a, 12b does not define a terminal end of the discharge tube 1; a terminal end of the third cylindrical portions 13a and 13b defines the terminal end of Sugimoto's discharge tube 1 (see Figs. 2 and 3).

Even if the PTO were to assert that the second cylindrical portions 12a, 12b and the third cylindrical portions 13a, 13b, if combined together, correspond to the claimed electrode insertion section, Applicant respectfully submits that the thickness dimension of the combined structure of the second cylindrical portions 12a, 12b and the third cylindrical portions 13a, 13b is still not substantially constant along the entire length of the combined structure, as recited in rewritten claim 4. That is, the thickness dimensions, defined between inner and outer surfaces of the second cylindrical portions 12a, 12b and the inner and outer surfaces of the third cylindrical portions 13a, 13b, are not substantially constant because the thickness dimension of the second cylindrical portion 12a, 12b is greater than the thickness dimension of the third cylindrical portion 13a, 13b. Further, the overlapping portion F (see Fig. 3) of the

second cylindrical portion 12a and the third cylindrical portion 13a is clearly greater than the thickness dimension of either of the cylindrical portions 12a, 12b and 13a, 13b.

In view of the fact that Sugimoto does not disclose each and every feature recited in independent claim 4, Applicant respectfully submits that rewritten claim 4 defines patentable subject matter over Sugimoto. For at least the foregoing reasons, Applicant respectfully requests that the above rejection be reconsidered and withdrawn.

3. Claims 2 and 3 were rejected under §103(a) over Sugimoto in view of Heytmeijer and further in view of Oda. Applicant respectfully traverses this rejection.

Claim 2 depends from independent claim 4, which is discussed in section 2 above, and claim 3 depends from claim 2. Since claim 4 defines patentable subject matter over the primary reference, Applicant respectfully submits that claims 2 and 3 likewise define patentable subject matter over the applied references by virtue of their dependency from independent claim 4. Accordingly, Applicant respectfully requests that the above rejection be reconsidered and withdrawn.

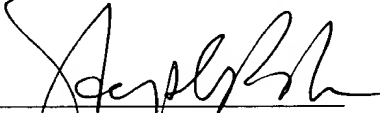
**4. Applicant respectfully requests that the PTO acknowledge receipt and consideration of the references cited in the Information Disclosure Statement filed on July 28, 2003.**

If the Examiner believes that contact with Applicants' attorney would be advantageous toward the disposition of this case, the Examiner is herein requested to call Applicants' attorney at the phone number noted below.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

October 21, 2003  
Date

Respectfully submitted,



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